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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,136	09/19/2001	Yutaka Tokura	35.C15798	8381

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FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

HANG, VU B

ART UNIT	PAPER NUMBER
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2625

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/955,136

Applicant(s)

TOKURA, YUTAKA

Examiner

Vu B. Hang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11, 17-19 and 25-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11, 17-19 and 25-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

- This office action is responsive to the following communication: a Request for Continued Examination filed on 01/31/2007.
- The amendments received on 01/31/2007 have been entered and made of record.
- Claims 11, 17-19 and 25-32 are pending in the application.

Response to Amendment

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/31/2007 has been entered.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 19, 25-27 and 31-32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows:

Claims 19, 25-27 and 31-32 define a method, which are merely claims computer program steps. The method claims for (a) a discriminating unit adapted to discriminate to which of the first printer and second printer each page of information outputted; (b) outputting to the first

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printer, the print information which was determined to be outputted to the first printer, and to output to the second printer, the page in the print information which was determined to be outputted to the second printer; (c) outputting the page in the print information together with the designation of an ejection position; and (d) adding control information for switching ejecting positions in regarding the pages in which a succession of page numbers was broken to the print information which is outputted to either the first or second printer by the output unit in a manner such that the pages are sorted and ejected on the basis of succeeding page numbers in the first or second printer. The recited method is with functional descriptive material. While functional descriptive material may be claimed as a statutory product (i.e., a "manufacture") when embodied on a tangible computer readable medium, a "computer program step" per se does not fall within any of the four statutory classes of 35 U.S.C. 101. Furthermore, a "computer program step" is not a "machine", "composition of matter" or a "manufacture" because these statutory classes relate to structural entities and can be grouped as "product" claims in order to contrast with "process" claims (1D. Chisum, Patents §1.02 (1994)). Machines, manufactures and compositions of matter are embodied by physical structures or material, whereas "computer program steps" are not "machines" because they have no physical structures, and do not perform any useful, concrete and tangible results. Likewise, "computer program steps" are not compositions of matter because they are not matter, but rather a form of conceptual idea. Finally, "computer program steps" are not "manufactures" because all traditional definitions of a manufacture have required some form of physical structure, which the claimed "computer program steps" do not have.

A "manufacture" is defined as "the production of articles for use from raw materials or prepared materials by giving to these materials new forms, qualities, properties or combinations, whether by hand-labor or by

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machinery.” *Diamond v. Chakrabarty*, 447 U.S. 303, 308, 206 USPQ 193, 196-97 (1980) (quoting *American Fruit Growers, Inc. v. Brogdex Co.*, 283 U.S. 1, 11, 8, USPQ 131, 133 (1931)).

2. Therefore, a method merely claims for a computer program steps is considered non-statutory because it is a form of conceptual idea, in the absence of any physical structure or tangible material, that does not fall within any of the four statutory classes of 35 U.S.C. §101.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11, 17-19 and 25-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato (US Patent 5,978,557) in view of Neuhard et al (US Patent 6335,795 B1).

5. Regarding **Claims 11 and 19**, Kato discloses an information processing apparatus connected to a first printer and a second printer (see Fig.8, Col.1, Line 45-50 and Col.8, Line 60-61), comprising:

a discriminating unit adapted to discriminate to which of the first printer and second printer each page of information outputted (see Fig.4 (S8, S9, S12) and Col.1, Line 57-65);

an output unit adapted to output to the first printer, the print information which was determined to be outputted to the first printer, and to output to the second printer, the page in the print information which was determined to be outputted to the second printer (see Fig.4 (S8, S9, S12), Fig.8, and Col.1, Line 57-65); and

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a controller, adapted to add control information for switching ejecting positions in regarding the pages in which a succession of page numbers was broken to the print information which is outputted to either the first or second printer by the output unit in a manner such that the pages are sorted and ejected on the basis of succeeding page numbers in the first or second printer (see Fig.7, Col.5, Line 4-30 and Col.6, Line 4-7).

Kato fails to disclose a mechanism for outputting a page in the print information together with the designation of an ejection position; and outputting a certain page, based on the discrimination from the discrimination unit, a certain page which is not serial to the previously outputted page to the first printer, together with the designation changed from the designation of the first ejection position. Neuhard, however, discloses a user interface for submitting a job ticket with user-specified print options (see Fig.5a, Col.3, Line 16-20 and Col.4, Line8-11), and a mechanism for selecting a specific printer based information from the job ticket (see Fig.5a and Col.4, Line 29-37). Neuhard further discloses a mechanism for specifying a monochromatic or color printer (see Fig.5a) and determining whether specific parts of a document in the job ticket should be printed monochromatically or in color (see Fig.2 and Col.5, Line 37-56).

Kato and Neuhard are combinable because they are from the same field of endeavor, namely network printing systems. At the time of the invention, it would have been obvious for one skilled in the art to use the user interface and the document information in the user-specified job ticket for outputting a page in the print information together with the designation of an ejection position; and outputting a certain page, which is not serial to the previously outputted page to the first printer, together with the designation changed from the designation of the first ejection position. The motivation would be to route specific document parts to specific printers

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for printing in color or monochrome. This would increase the efficiency of the printing system the transition from a color mode to monochromatic, and vice versa, causes delay in printing a document. With separate color and monochromatic printers, the specified document parts can be routed to one of the printers for printing, and thereby increase the efficiency of the printing process.

6. Regarding **Claims 17 and 25**, Kato further discloses that the discriminating unit discriminates to which the first printer and the second printer each page of the print information should be outputted in accordance with whether information to be color printed exists in each page of the print information or not (see Fig.4 (S4, S8, S9, S12) and Col.1, Line 57-65).

7. Regarding **Claims 18 and 26**, Kato further discloses that the first printer is a monochromatic printer and the second printer is a color printer (see Fig.8 (2000,3000)).

8. Regarding **Claims 27 and 28**, Claims 27-28 cite identical features as Claim 11 except Claims 27-28 are computer readable medium claims. Thus, arguments similar to that presented above for Claim 11 are equally applicable to Claims 27-28 because without a computer readable medium to store a program that makes it possible for the apparatus to operate, the apparatus could not function.

9. Regarding **Claims 29 and 31**, Kato discloses an information processing apparatus capable of communicating with a plurality of print control apparatuses including a color print control apparatus and a monochromatic print control apparatus (see Fig.1 (1,7), Fig.2, Fig.8 and Col.3, Line 25-31), the information processing apparatus comprising: a discriminating unit adapted to discriminate whether print data to be output to any of the plurality of print control apparatuses is color data or monochromatic data (see Fig.4 (S8, S9, S12) and Col.1, Line 57-65);

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a determination unit adapted to determine whether the print data to be output either to the color print control apparatus or the monochromatic print control apparatus based on the discrimination made by the discrimination unit (see Fig.4 (S8, S9, S12), Fig.8, and Col.1, Line 57-65); a means for designating an ejecting destination (see Fig.4 (S8, S9, S12)); a first output unit adapted to, when the determination unit determines that the print data is to be output to the color print control apparatus, output the print data to the color print control apparatus with a designation of a first ejection destination (see Fig.7, Col.5, Line 4-30 and Col.6, Line 4-7); and a second output unit adapted to, when the determination unit determines that the print data is to be output to the monochromatic print control apparatus, output the print data to the monochromatic print control apparatus with a designation of a second ejection destination (see Fig.7, Col.5, Line 4-30 and Col.6, Line 4-7).

Kato fails to disclose a means for outputting a certain page while maintaining the designation of the first ejection destination, if a page is serial to a previously outputted page, and outputting a certain page together with a designation changed from the designation of the first ejection, when an output destination is changed, if the page is not serial to the previously outputted page. Neuhard, however, discloses a user interface for submitting a job ticket with user-specified print options (see Fig.5a, Col.3, Line 16-20 and Col.4, Line8-11), and a mechanism for selecting a specific printer based information from the job ticket (see Fig.5a and Col.4, Line 29-37). Neuhard further discloses a mechanism for specifying a monochromatic or color printer (see Fig.5a) and determining whether specific parts of a document in the job ticket should be printed monochromatically or in color (see Fig.2 and Col.5, Line 37-56).

Kato and Neuhard are combinable because they are from the same field of endeavor, namely network printing systems. At the time of the invention, it would have been obvious for one skilled in the art to use the user interface and the document information in the user-specified job ticket to determine whether or not a page is serial to the previously outputted page, and for maintaining the designation of the first ejection destination, if a page is serial to a previously outputted page, and outputting a certain page together with a designation changed from the designation of the first ejection, when an output destination is changed, if the page is not serial to the previously outputted page. The motivation would be to determine the document pages to be printed in color and monochrome, and to route the specific document pages to specific printers for printing in monochrome or in color. This would increase the efficiency of the printing system the transition from a color mode to monochromatic, and vice versa, causes delay in printing a document. With separate color and monochromatic printers, the specified document parts can be routed to one of the printers for printing, and thereby increase the efficiency of the printing process.

10. Regarding **Claims 30 and 32**, Kato and Idehera disclose the apparatus of Claim 30 but fail to expressly disclose a holding unit adapted to hold information on the first or second ejection destination. Kato, however, discloses a print network system including a print server (see Fig.1 (1,7), Fig.2 (20) and Col.3, Line 29-31). At the time of the invention, it would have been obvious to use the print server as a holding unit for holding information on the first or second ejection destination. The motivation would be to automatically eject the document pages to either the first or second printer depending on the color information contained in the image data.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu B. Hang whose telephone number is (571) 272-0582. The examiner can normally be reached on Monday-Friday, 9:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vu Hang
Assistant Examiner
Art Unit 2625



TWYLER LAMB
SUPERVISORY PATENT EXAMINER